

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Amend the Paragraphs beginning on page 6, line 26, to read as follows.

[0035]

Fig. 1 is a schematic block diagram illustrating a structure of an on-vehicle audio signal recording/reproduction device for which this invention is used. The present embodiment is an on-vehicle audio signal recording/reproduction device 1000, which is separated into a main unit 1 and a digital processing unit 2. The main unit 1 is equivalent to a conventional on-vehicle system, and comprises an antenna 3, a tuner 4, a host microcomputer 5, a sub microcomputer 6, an electronic volume 7, a power amplifier 8, a speaker 9, a liquid crystal display (LCD) 10 for display, an LCD driver 11, a DC fan 12 for cooling, a DC fan controller 13, an operation switch 14, and a remote control receiver 15. Detailed description of the main unit ~~2~~ 1 will be omitted.

[0036]

The digital processing unit 2 is provided with a hard disk 21 and a CD-ROM drive 22 as recording or reproducing media. A DSP (Digital Signal Processor) 24 is connected with the hard disk 21, the CD-ROM drive 22, an SD-RAM (Synchronous DRAM) 26 and a flash memory 27 through an IDE (Integrated Drive Electronics) bus 25. Audio output from the DSP 24 is supplied to the electronic volume controller 7 through a DAC (Digital Analog Converter) ~~28~~ 29, and is amplified by the power amplifier 8, so that the audio output is eventually released from the speaker 9.

[0037]

The DSP 24 performs decoding/encoding of audio signals. More specifically, for example, audio CDs mounted on the CD-ROM drive 22 are reproduced, and their CD-DA formatted signals are supplied to the DSP 24 through the IDE bus 25. The DSP 24 performs MP3 (MPEG Audio Layer-3) encoding of the CD-DA formatted signals in real-time. The DSP 24 records the MP3 signals given to the hard disk 21 from the IDE bus 25 as digital signals. Also, the DSP 24 decodes the MP3 digital signals read out from the hard disk 21 and supplies them to the DAC 28 29 as digital audio signals. The SD-RAM 26 and the flash memory 27 store programs and data necessary for this encoding/decoding, or they are used as a working area.

Amend the Paragraph beginning on page 10, line 8, to read as follows.

[0048]

In the aforementioned process, data of the number of mountings and the effective work sector number are repeatedly read in from sectors having even numbers within the area with LBA (Logical Block Addresses) of sectors from 8 to 61. With the process from Step 39 to (1) in Fig. 5 (Step 46), the number of accumulated mountings in previous mounting (the maximum number of mountings recorded in the work sector) and the effective current work sector number in previous mounting are held respectively in variables “maximum number of mountings” and “current work sector number”.

Amend the Paragraph beginning on page 11, line 5, to read as follows.

[0050]

The process beginning from Step 56 of Fig. 6 is a preprocessing for checking during mounting this time. First, variables are initialized by performing the initial processing operation in Step 56. In other words, the LBA and the current work sector are set to 8 and 0 respectively, and the maximum number of mountings is incremented by +1. The process proceeds to Step 57. In Step 57, whether the variable “maximum number of mountings” is larger than the ~~2-bit~~ 32-bit binary code 0xFFFFFFFF or not is judged. When it becomes larger than the 32-bit binary code 0xFFFFFFFF as a result of the variable “maximum number of mountings” being incremented by +1, the process proceeds to Step 58 in which 1 is substituted as the maximum number of mountings. When the variable “maximum number of mountings” is not larger than the 32-bit binary code 0xFFFFFFFF, the process proceeds to Step 59.

Amend the Paragraph beginning on page 11, line 30, to read as follows.

[0052]

If a writing error is judged to have occurred in Step 61, the process proceeds to Step 64 in which the LBA is incremented by +2. The process goes back to Step ~~61~~ 59 to repeat the foregoing operation.

Amend the Paragraph beginning on page 12, line 22, to read as follows.

[0057]

When the end of the loop is detected in Step ~~64~~ 67, the file system mounting process is performed in Step 66. The process proceeds to Step 72. Whether a mount error has occurred or not is judged in Step 72. If the mount error has not occurred, mounting is completed. When the mount error has occurred, the process ends as a mount error.

Amend the Paragraphs beginning on page 13, line 21, to read as follows.

[0062]

Fig. 12 illustrates a directory structure of this invention. Here, the main database file is called the master DB (DB (SYS)), and the files for backup are called the backup 1 DB (DB (BU1)) and the backup 2 DB (DB (BU2)). Each DB file is recorded in a different directory. Here, for example, the master DB file is recorded in the system directory on the hard disk, the backup 1 DB file is recorded in the backup 1 directory, and the backup 2 DB file is recorded in the backup 2 directory. Audio data is structured in directories MUSIC 1 – 10, below which directories ~~ALBAUM~~ ALBUM 1 - 10 are formed. Directories T01 – 99 are formed further below, and tunes in one album are stored in these T directories.

[0063]

Fig. 13 illustrates a structure of a data base file. In the header part of each DB file, a flag to indicate updating condition of the file is written. Namely, the flag will be “E” to indicate the file

is being edited, “C” (a flag exclusive for the master DB) to indicate the file is being copied into a backup DB, and “F” to indicate the editing of the file is completed.

Amend the Paragraph beginning on page 14, line 23, to read as follows.

[0066]

On the other hand, when the updating flag of the backup 1 DB is not “F” in Step 201, the process proceeds to Step 202, in which whether the updating flag of the backup 1 DB is “F” or not is judged. If the flag is “F”, contents of the backup 1 DB are written in the backup 2 DB, and contents of the backup 1 DB are written in the master DB. The process proceeds to Step 207.

Amend the Paragraph beginning on page 16, line 25, to read as follows.

[0078]

Backups of the database file are formed by Step 217 through Step 24 224. Furthermore, even when the process is halted during formation of backups due to power cut-off or the like, it is possible to prevent inconsistency between the database file and the audio data file through the flow in Fig. 7.

Amend the Paragraph beginning on page 19, line 8, to read as follows.

[0090]

The effectiveness of this operation can be confirmed by following read operation from the sector. Fig. 11 shows read operation from the sector. Data is read from the designated sector in this read

operation where the LBA is designated. If there is no read error, read operation is completed (Step ~~75~~ 76). If there is an error, the process proceeds to Step ~~76~~ 77, in which whether contents of the directory entry are read or not is judged (Step ~~76~~ 77). Basically, in the process which calls the sector reading process, whether the directory entry is to be read or not is decided. Therefore, this information is used in Step 75. If it is not the directory entry, the process ends with error. If it is the directory entry, the process proceeds to Step ~~77~~ 78, wherein data is read from the sector of the designated LBA + 16 in order to be used as information about the directory entry. In other words, regarding the directory entry, same information is doubly recorded in one cluster, which is highly redundant and resistant to errors. Therefore, it is highly effective for application to audio signal recording/reproduction devices for on-vehicle use and the like.